

Appendix C

SELECT PETROLEUM GEOLOGIC DATA USED TO ASSESS UNDISCOVERED CONVENTIONALLY RECOVERABLE RESOURCES

This appendix presents select petroleum geologic data and information used to develop estimates of the volume of undiscovered conventionally recoverable oil and gas resources in 46 petroleum geologic plays of the Pacific OCS Region. The data are presented in one of two tabular formats by play, depending upon the assessment method used to develop the estimates (see *Methodology* section). The following describes the categories and types of data included in each of the tabular formats. Multiple values (minimum, median, and maximum) are presented for parameters that are described by a probability distribution. A single value (most probable) is presented for parameters that are described by a constant.

PLAYS ASSESSED BY THE SUBJECTIVE ASSESSMENT METHOD

Tabular data for 40 plays that have been assessed by the subjective assessment method include the following categories and parameters. Some parameters (e.g., prospect area and trap fill) have been defined using empirical data and/or subjective judgment; some parameters have been computed by combining other parameters (e.g., prospect area x trap fill = pool area). The computed values presented here correspond to specific levels of probability and have not been rounded to reflect their relative precision.

Size of Accumulations

Prospect Area:	the lateral (areal) extent of individual prospects, expressed in acres
Trap Fill:	the portion of the prospect area filled with hydrocarbons, expressed as a decimal fraction
Pool Area:	the lateral (areal) extent of individual pools, expressed in acres
Reservoir Rock Thickness:	the vertical extent (thickness) of reservoir rock, expressed in feet
Reservoir Rock Volume:	the volume of reservoir rock at individual prospects, expressed in acre-feet
Net Pay:	the vertical extent (thickness) of hydrocarbon-bearing rock, expressed in feet
Volume Fill:	the portion of the reservoir rock volume filled with hydrocarbons, expressed as a decimal fraction
Pool Volume:	the hydrocarbon-filled volume of individual pools, expressed in acre-feet

Number of Accumulations

Number of Prospects:	the number of prospects that are estimated to exist
Number of Pools:	the number of undiscovered pools that are estimated to exist

Type of Accumulations

Oil Pools:	the portion of the number of pools that contain predominantly crude oil and associated gas, expressed as a decimal fraction
Gas Pools:	the portion of the number of pools that contain predominantly nonassociated gas and may contain condensate, expressed as a decimal fraction
Mixed Pools:	the portion of the number of pools that contain crude oil, associated gas, and nonassociated gas, and may contain condensate, expressed as a decimal fraction

Oil-filled Mixed Pool Volume

Mixed Pools:	the portion of the pool volume of mixed pools that is filled with crude oil and associated gas, expressed as a decimal fraction
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Petroleum Geologic Probabilities

Probability factors at the group (play chance) and individual (prospect chance) levels

Hydrocarbon Fill:	the probability that hydrocarbons have been generated, migrated, and are preserved, expressed as a decimal fraction
Reservoir Rock:	the probability that reservoir rocks exist, expressed as a decimal fraction
Trap:	the probability that traps and seals exist, and that the timing of migration and trap formation have permitted entrapment, expressed as a decimal fraction

Overall probabilities at the group (play chance) and individual (prospect chance, average chance) levels

Play Chance:	the probability that conventionally recoverable hydrocarbons exist in at least one accumulation in the play, expressed as a decimal fraction
Prospect Chance:	the probability that undiscovered conventionally recoverable hydrocarbons exist in an individual accumulation in the play, given the conditional assumption that at least one accumulation exists in the play, expressed as a decimal fraction
Average Chance:	the probability that undiscovered conventionally recoverable hydrocarbons exist in an individual accumulation in the play, with consideration of the probability that at least one accumulation exists in the play, expressed as a decimal fraction

Hydrocarbon Recovery

Oil Yield:	the proportional volume of crude oil that can be extracted from the pool volume of an oil or mixed pool, expressed in barrels per acre-foot
Gas Yield:	the proportional volume of nonassociated gas that can be extracted from the pool volume of a gas pool, expressed in million cubic feet per acre-foot
Condensate Yield:	the proportional volume of condensate that can be extracted with nonassociated gas from a gas or mixed pool, expressed in barrels per million cubic feet
Solution Gas-to-Oil Ratio:	the proportional volume of associated gas that can be extracted with crude oil from an oil or mixed pool, expressed in cubic feet per barrel

PLAYS ASSESSED BY THE DISCOVERY ASSESSMENT METHOD

Tabular data for six plays that have been assessed by the discovery assessment method include the following categories and parameters.

Size Distribution of Accumulations

μ (mu):	the natural logarithm of the median value of a lognormal pool-size distribution, expressed as a dimensionless value
σ^2 (sigma squared):	the variance of a lognormal pool-size distribution, expressed as a dimensionless value

Number of Accumulations

Discovered Pools:	the number of pools that have been discovered
Undiscovered Pools:	the number of undiscovered pools that are estimated to exist
Total Pools:	the total number of discovered and undiscovered pools that are estimated to exist

Discovered Accumulations

Pool Rank:	the rank (position) of an individual pool among the discovered pools and all (discovered and undiscovered) pools, which have been ranked in descending order of their estimated volume of undiscovered conventionally recoverable combined oil-equivalent (BOE) resources
Field:	the name of the field in which the discovered pool exists
Location:	the location of the pool among onshore, State offshore, and/or Federal offshore areas
Original Recoverable Reserves:	the volume of discovered oil and gas resources (including cumulative production and remaining reserves) that is estimated to be economically recoverable from an individual pool
Oil:	the volume of crude oil and condensate, expressed in millions of barrels
Gas:	the volume of associated and nonassociated gas, expressed in billion cubic feet
BOE:	the volume of combined oil-equivalent resources, expressed in millions of barrels

Washington-Oregon Area, Growth Fault Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	50	900	8,500
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	12	237	6,742
Net Pay (feet)	40	200	900
Pool Volume (acre-feet)	1,590	47,316	2,266,243
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	37	70	140
Number of Pools	0	10	46
Type of Accumulations			
Oil Pools (fraction)	0.70		
Gas Pools (fraction)	0.10		
Mixed Pools (fraction)	0.20		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.5	
Reservoir Rock	0.9	0.8	
Trap	0.9	0.5	
Overall	0.6	0.2	0.12
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Washington-Oregon Area, Neogene Fan Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	7,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	3	75	3,540
Net Pay (feet)	20	140	900
Pool Volume (acre-feet)	237	10,122	1,096,600
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	320	520	830
Number of Pools	0	81	206
Type of Accumulations			
Oil Pools (fraction)	0.25		
Gas Pools (fraction)	0.55		
Mixed Pools (fraction)	0.20		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.5	
Reservoir Rock	1.0	0.9	
Trap	0.9	0.4	
Overall	0.6	0.2	0.12
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Washington-Oregon Area, Neogene Shelf Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	9,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	3	75	3,608
Net Pay (feet)	20	75	300
Pool Volume (acre-feet)	170	5,578	437,390
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	805	1,310	2,100
Number of Pools	0	102	258
Type of Accumulations			
Oil Pools (fraction)	0.60		
Gas Pools (fraction)	0.20		
Mixed Pools (fraction)	0.20		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.4	
Reservoir Rock	0.9	0.4	
Trap	0.9	0.5	
Overall	0.6	0.1	0.06
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Washington-Oregon Area, Paleogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	7,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	3	75	3,540
Net Pay (feet)	20	75	300
Pool Volume (acre-feet)	170	5,583	405,770
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	295	480	770
Number of Pools	0	70	196
Type of Accumulations			
Oil Pools (fraction)	0.05		
Gas Pools (fraction)	0.80		
Mixed Pools (fraction)	0.15		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.5	
Reservoir Rock	0.9	0.8	
Trap	0.8	0.5	
Overall	0.6	0.2	0.12
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	10	110	500
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Eel River Basin, Neogene Fan Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	4,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	5	103	3,292
Net Pay (feet)	20	140	900
Pool Volume (acre-feet)	364	13,861	1,205,146
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	46	75	120
Number of Pools	12	38	80
Type of Accumulations			
Oil Pools (fraction)	0.05		
Gas Pools (fraction)	0.80		
Mixed Pools (fraction)	0.15		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.8	
Reservoir Rock	1.0	0.8	
Trap	1.0	0.8	
Overall	1.0	0.5	0.5
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Eel River Basin, Neogene Shelf Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	7,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	5	103	3,796
Net Pay (feet)	20	75	300
Pool Volume (acre-feet)	260	7,647	527,163
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	180	300	480
Number of Pools	0	117	230
Type of Accumulations			
Oil Pools (fraction)	0.05		
Gas Pools (fraction)	0.80		
Mixed Pools (fraction)	0.15		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.95	0.8	
Reservoir Rock	0.95	0.6	
Trap	1.0	0.8	
Overall	0.9	0.4	0.36
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Eel River Basin, Paleogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	280	5,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	3	75	3,473
Net Pay (feet)	20	45	100
Pool Volume (acre-feet)	131	3,312	185,218
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	70	115	180
Number of Pools	0	0	57
Type of Accumulations			
Oil Pools (fraction)	0.50		
Gas Pools (fraction)	0.20		
Mixed Pools (fraction)	0.30		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	0.1	0.3	0.6
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.5	
Reservoir Rock	0.6	0.6	
Trap	0.8	0.6	
Overall	0.4	0.2	0.08
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	10	110	500
Gas Yield (MMcf per acre-foot)	0.2	0.425	0.9
Condensate Yield (bbl per MMcf)	0.001	0.0031	0.01
Solution Gas-to-Oil Ratio (cf per bbl)	200	2,000	20,000

Point Arena Basin, Neogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	100	1,000	10,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	16	261	7,888
Net Pay (feet)	10	63	375
Pool Volume (acre-feet)	460	16,063	1,087,510
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	45	55	70
Number of Pools	0	13	37
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.9	0.6	
Reservoir Rock	1.0	0.9	
Trap	0.7	0.6	
Overall	0.6	0.3	0.18
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	300	1,000	3,500

Point Arena Basin, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	30	620	13,000
Reservoir Rock Thickness (feet)	500	2,000	7,000
Reservoir Rock Volume (acre-feet)	3,000	270,000	23,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	733	96,724	15,679,770
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	210	240	270
Number of Pools	51	96	139
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.8	
Reservoir Rock	1.0	0.8	
Trap	1.0	0.7	
Overall	1.0	0.4	0.4
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	49	80
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	880	3,000

Point Arena Basin, Pre-Monterey Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	30	520	9,000
Trap Fill (fraction)	0.1	0.35	1.0
Pool Area (acres)	10	189	5,806
Net Pay (feet)	8	45	375
Pool Volume (acre-feet)	248	8,453	837,677
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	240	275	330
Number of Pools	0	77	128
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.7	
Reservoir Rock	1.0	0.6	
Trap	1.0	0.7	
Overall	0.7	0.3	0.21
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	20	110	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	1,100	5,000

Bodega Basin, Neogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	100	1,000	10,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	16	261	7,888
Net Pay (feet)	10	63	375
Pool Volume (acre-feet)	460	16,063	1,087,500
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	30	37	45
Number of Pools	0	8	27
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.9	0.6	
Reservoir Rock	1.0	0.8	
Trap	0.7	0.6	
Overall	0.6	0.3	0.18
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	300	1,000	3,500

Bodega Basin, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	520	7,000
Reservoir Rock Thickness (feet)	550	2,000	7,000
Reservoir Rock Volume (acre-feet)	5,000	300,000	17,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	1,103	103,379	11,726,050
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	75	120	200
Number of Pools	5	62	126
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.8	
Reservoir Rock	1.0	0.8	
Trap	1.0	0.8	
Overall	1.0	0.5	0.5
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	49	80
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	880	3,000

Bodega Basin, Pre-Monterey Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	550	8,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	11	207	5,595
Net Pay (feet)	33	125	470
Pool Volume (acre-feet)	883	25,797	1,178,800
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	125	165	220
Number of Pools	0	45	92
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.6	
Reservoir Rock	1.0	0.7	
Trap	1.0	0.7	
Overall	0.7	0.3	0.21
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	20	110	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	1,100	5,000

Año Nuevo Basin, Neogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	50	540	6,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	12	200	5,065
Net Pay (feet)	10	63	375
Pool Volume (acre-feet)	334	12,335	845,940
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	25	43	73
Number of Pools	0	13	37
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.7	
Reservoir Rock	1.0	0.8	
Trap	0.95	0.6	
Overall	0.95	0.3	0.29
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	300	1,000	3,500

Año Nuevo Basin, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	70	800	10,000
Reservoir Rock Thickness (feet)	840	2,200	6,000
Reservoir Rock Volume (acre-feet)	7,000	300,000	12,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	1,505	103,380	8,534,100
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	31	59	112
Number of Pools	0	36	86
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.9	
Reservoir Rock	1.0	0.9	
Trap	1.0	0.7	
Overall	1.0	0.6	0.6
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	49	80
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	880	3,000

Año Nuevo Basin, Pre-Monterey Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	520	7,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	10	191	5,770
Net Pay (feet)	10	50	235
Pool Volume (acre-feet)	248	9,114	579,910
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	57	82	115
Number of Pools	0	20	54
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.7	
Reservoir Rock	0.6	0.6	
Trap	1.0	0.7	
Overall	0.6	0.3	0.18
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	130	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	1,100	5,000

Santa Maria-Partington Basin, Basal Sisquoc Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)			
Trap Fill (fraction)			
Pool Area (acres)	40	300	2,300
Net Pay (feet)	9	45	245
Pool Volume (acre-feet)	754	13,962	491,350
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects			
Number of Pools		15	
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.9	
Reservoir Rock	1.0	0.95	
Trap	1.0	0.7	
Overall	1.0	0.6	0.6
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	175	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	880	3,000

Santa Maria-Partington Basin, Monterey Fractured Play

Size Distribution of Accumulations						
μ (mu)		1.70				
σ^2 (sigma squared)		2.75				
Number of Accumulations						
Discovered Pools		13				
Undiscovered Pools		77				
Total Pools		90				
Discovered Accumulations						
Pool Rank				Original Recoverable Reserves		
Of	Of			Oil	Gas	BOE
Disc.	All	Field	Location	(MMbbl)	(Bcf)	(MMbbl)
1	1	Point Arguello	Federal Offshore	266.65	320.37	323.66
2	3	Rocky Point	Federal Offshore	84.26	84.26	99.25
3	4	Point Pedernales	Federal Offshore	77.30	17.00	80.33
4	5	San Miguel	Federal Offshore	72.40	30.80	77.88
5	6	Point Sal	Federal Offshore	63.30	63.50	74.60
6	7	Purisima Point	Federal Offshore	54.70	37.00	61.29
7	8	Unnamed OCS-P 0435	Federal Offshore	46.65	23.32	50.80
8	9	Bonito	Federal Offshore	40.80	51.00	49.88
9	23	Unnamed OCS-P 0443	Federal Offshore	14.00	14.00	16.49
10	25	Unnamed OCS-P 0395	Federal Offshore	12.39	12.39	14.60
11	27	Electra	Federal Offshore	10.90	13.30	13.27
12	29	Jalama	Federal Offshore	10.51	7.20	11.79
13	68	Santa Maria	Federal Offshore	1.54	1.54	1.81

Santa Maria-Partington Basin, Paleogene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	520	7,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	10	191	5,770
Net Pay (feet)	14	72	375
Pool Volume (acre-feet)	359	13,692	924,110
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	23	33	46
Number of Pools	0	0	20
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.7	
Reservoir Rock	0.7	0.7	
Trap	0.5	0.5	
Overall	0.2	0.2	0.04
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	20	110	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	2,000	15,000

Santa Maria-Partington Basin, Breccia Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)			
Trap Fill (fraction)			
Pool Area (acres)	20	200	2,000
Net Pay (feet)	20	100	500
Pool Volume (acre-feet)	802	21,154	854,530
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	31	38	45
Number of Pools	0	0	17
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.9	0.9	
Reservoir Rock	0.5	0.5	
Trap	0.3	0.3	
Overall	0.15	0.15	0.02
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	70	180	450
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	250	880	3,000

Santa Barbara-Ventura Basin, Pico-Repetto Sandstone Play

Size Distribution of Accumulations						
μ (mu)		1.05				
σ^2 (sigma squared)		6.20				
Number of Accumulations						
Discovered Pools		26				
Undiscovered Pools		54				
Total Pools		80				
Discovered Accumulations						
Pool Rank			Original Recoverable Reserves			
Of	Of			Oil	Gas	BOE
<u>Disc.</u>	<u>All</u>	<u>Field (Area)</u>	<u>Location</u>	(MMbbl)	(Bcf)	(MMbbl)
1	1	Ventura-San Miguelito-Rincon	Onshore & State Offshore	1,324.40	2,501.80	1,769.50
2	3	Dos Cuadras	Federal Offshore	256.20	137.00	280.58
3	5	Carpinteria	State & Federal Offshore	108.80	110.97	128.55
4	7	Saticoy-South Mountain (Bridge pool)	Onshore	69.26	95.24	86.21
5	9	Placerita	Onshore	60.66	6.89	61.89
6	10	Santa Clara	Federal Offshore	44.27	60.19	54.98
7	11	Pitas Point	Federal Offshore	0.26	239.21	42.83
8	12	Aliso Canyon	Onshore	33.15	31.95	38.83
9	19	Fillmore	Onshore	13.42	20.25	17.02
10	23	West Montalvo	Onshore	4.37	36.67	10.90
11	24	Timber Canyon	Onshore	8.04	16.07	10.89
12	29	Oxnard	Onshore	7.13	<0.01	7.13
13	33	Del Valle	Onshore	1.26	21.15	5.03
14	37	Bardsdale	Onshore	3.33	1.86	3.66
15	47	Shiells Canyon	Onshore	1.31	2.12	1.69
16	51	Anacapa	Federal Offshore	1.11	0.88	1.26
17	52	Ojai (Weldon Canyon)	Onshore	0.96	1.13	1.16
18	53	Newhall (Elsmere)	Onshore	1.07	<0.01	1.07
19	55	Santa Paula (Adams Canyon)	Onshore	0.87	0.27	0.91
20	57	Santa Paula (Wheeler Canyon)	Onshore	0.45	1.51	0.72
21	61	Santa Paula (Santa Paula Canyon)	Onshore	0.47	0.10	0.49
22	62	Mission (Fernando pool)	Onshore	0.42	0.18	0.45
23	63	Santa Paula (Aliso Canyon)	Onshore	0.40	<0.01	0.40
24	64	Santa Paula (Salt Marsh Canyon)	Onshore	0.36	0.05	0.37
25	72	Cañada Larga	Onshore	0.11	0.08	0.13
26	78	Long Canyon	Onshore	0.02	0.04	0.02

Santa Barbara-Ventura Basin, Monterey Fractured Play

Size Distribution of Accumulations						
μ (mu)			2.00			
σ^2 (sigma squared)			2.50			
Number of Accumulations						
Discovered Pools			26			
Undiscovered Pools			104			
Total Pools			130			
Discovered Accumulations						
Pool Rank			Original Recoverable Reserves			
Of	Of			Oil	Gas	BOE
Disc.	All	Field (Area)	Location	(MMbbl)	(Bcf)	(MMbbl)
1	1	Hondo	Federal Offshore	261.90	737.52	393.13
2	2	Smuggler's Cove	Federal Offshore	200.00	331.93	259.06
3	5	Pescado	Federal Offshore	100.20	150.60	127.00
4	6	Coal Oil Point Offshore (Devereaux)	State Offshore	100.00	50.00	108.90
5	10	Sacate	Federal Offshore	55.06	82.60	69.76
6	12	South Ellwood Offshore	State Offshore	56.00	34.00	62.05
7	13	Gato Canyon	Federal Offshore	46.95	63.38	58.22
8	16	Sockeye	Federal Offshore	36.00	52.50	45.34
9	17	Molino Offshore	State Offshore	40.00	20.00	43.56
10	21	Santa Clara	Federal Offshore	25.75	54.15	35.38
11	22	Sword	Federal Offshore	29.50	30.10	34.86
12	23	"Embarcadero Offshore"	State Offshore	30.00	15.00	32.67
13	25	Ojai (Silverthread)	Onshore	22.06	44.93	30.05
14	33	Unnamed OCS-P 0335	Federal Offshore	18.92	15.14	21.61
15	34	Castle Rock OCS-P 0321	Federal Offshore	17.20	19.78	20.72
16	35	Cojo Offshore (PRC 2879)	State Offshore	19.00	5.65	20.01
17	44	Ojai (North Sulphur Mountain)	Onshore	9.40	29.35	14.62
18	50	Oxnard	Onshore	11.61	2.33	12.03
19	76	Unnamed OCS-P 0358	Federal Offshore	5.11	1.02	5.29
20	82	Unnamed OCS-P 0479	Federal Offshore	4.26	0.85	4.41
21	87	Castle Rock OCS-P 0324	Federal Offshore	3.10	3.57	3.73
22	95	Unnamed OCS-P 0512	Federal Offshore	2.53	1.84	2.86
23	125	Ojai (Sulphur Mountain)	Onshore	0.45	0.11	0.47
24	127	Ojai (Sisar Creek)	Onshore	0.28	0.32	0.33
25	128	Sacate OCS-P 0195	Federal Offshore	0.24	0.36	0.30
26	130	Unnamed OCS-P 0318	Federal Offshore	0.16	0.03	0.17

Santa Barbara-Ventura Basin, Rincon-Monterey-Topanga Sandstone Play

Size Distribution of Accumulations						
μ (mu)		1.75				
σ^2 (sigma squared)		1.01				
Number of Accumulations						
Discovered Pools		8				
Undiscovered Pools		45				
Total Pools		53				
Discovered Accumulations						
Pool Rank		Original Recoverable Reserves				
Of	Of			Oil	Gas	BOE
<u>Disc.</u>	<u>All</u>	<u>Field (Area)</u>	<u>Location</u>	<u>(MMbbl)</u>	<u>(Bcf)</u>	<u>(MMbbl)</u>
1	1	"Embarcadero Offshore"	State Offshore	45.00	45.00	53.01
2	2	Coal Oil Point Offshore (Devereaux)	State Offshore	35.00	35.00	41.23
3	3	South Ellwood Offshore	State Offshore	25.50	25.50	30.04
4	8	Hueneme	Federal Offshore	15.80	4.81	16.66
5	10	Sockeye	Federal Offshore	11.73	14.53	14.32
6	21	Hondo	Federal Offshore	6.00	9.00	7.60
7	41	Ojai (Sulphur Crest)	Onshore	1.74	5.64	2.74
8	51	Ellwood	Onshore & State Offshore	0.60	2.47	1.04

Santa Barbara-Ventura Basin, Sespe-Alegria-Vaqueros Sandstone Play

Size Distribution of Accumulations						
μ (mu)		1.30				
σ^2 (sigma squared)		2.40				
Number of Accumulations						
Discovered Pools		44				
Undiscovered Pools		106				
Total Pools		150				
Discovered Accumulations						
Pool Rank		Original Recoverable Reserves				
Of	Of			Oil	Gas	BOE
Disc.	All	Field (Area)	Location	(MMbbl)	(Bcf)	(MMbbl)
1	1	South Mountain	Onshore	112.29	228.00	152.86
2	2	Ellwood	Onshore & State Offshore	107.79	97.69	125.17
3	6	Sespe (Tar Creek-Topatopa)	Onshore	43.91	69.17	56.22
4	7	Molino Offshore	State Offshore	4.42	240.00	47.13
5	8	Summerland Offshore	State Offshore	27.56	97.03	44.82
6	9	"Embarcadero Offshore"	State Offshore	25.00	100.00	42.79
7	10	Sockeye	Federal Offshore	23.00	97.75	40.39
8	11	West Montalvo	Onshore & State Offshore	34.85	29.15	40.04
9	12	Shiells Canyon	Onshore	24.88	49.11	33.62
10	14	Oxnard	Onshore	25.03	21.93	28.93
11	15	Hondo	Federal Offshore	13.00	80.50	27.32
12	16	South Ellwood Offshore	State Offshore	15.20	60.80	26.02
13	18	Capitan	Onshore & State Offshore	19.96	14.80	22.60
14	19	Conception Offshore	State Offshore	20.31	11.96	22.43
15	22	Coal Oil Point Offshore (Devereaux)	State Offshore	11.31	43.25	19.00
16	26	Sacate	Federal Offshore	8.67	40.60	15.89
17	32	Gaviota Offshore	State Offshore	<0.01	69.96	12.45
18	33	Unnamed OCS-P 0176	Federal Offshore	11.64	2.91	12.16
19	35	Bardsdale	Onshore	5.13	34.97	11.35
20	38	Santa Susana	Onshore	8.16	13.63	10.58
21	45	La Goleta	Onshore	<0.01	47.29	8.42
22	54	Santa Clara Avenue	Onshore	5.78	3.75	6.45
23	58	Caliente Offshore	State Offshore	<0.01	32.80	5.84
24	62	West Mountain	Onshore	4.47	3.76	5.14
25	63	Government Point	Federal Offshore	2.00	17.50	5.11
26	65	Sespe (Foot of the Hills)	Onshore	3.32	8.33	4.80
27	72	Naples Offshore	State Offshore	0.22	20.82	3.93
28	73	Cuarta Offshore	State Offshore	0.58	18.43	3.86
29	74	Mesa	Onshore	3.73	<0.01	3.73
30	75	Pescado	Federal Offshore	2.67	5.66	3.68
31	83	Sespe (Little Sespe Creek)	Onshore	2.19	4.69	3.03
32	85	Simi (Cañada de la Brea)	Onshore	2.63	1.37	2.88
33	91	Big Mountain	Onshore	1.88	3.15	2.44
34	98	Oak Park	Onshore	1.90	0.54	2.00
35	99	South Tapo	Onshore	1.51	2.41	1.94
36	102	Alegria Offshore	State Offshore	1.10	4.08	1.83
37	108	Simi (Old)	Onshore	1.44	0.50	1.53
38	120	Summerland	Onshore	0.71	1.70	1.01
39	137	Ojai (Lion Mountain)	Onshore	0.34	0.69	0.46
40	138	El Rio	Onshore	0.39	0.19	0.42
41	143	Moorpark West	Onshore	0.29	<0.01	0.29
42	145	Simi (Alamos Canyon)	Onshore	0.20	0.12	0.22
43	147	Refugio Cove	Onshore	<0.01	1.03	0.19
44	148	Goleta	Onshore	0.14	0.06	0.15

Santa Barbara-Ventura Basin, Gaviota-Sacate-Matilija Sandstone Play

Size Distribution of Accumulations						
μ (mu)			1.25			
σ^2 (sigma squared)			2.00			
Number of Accumulations						
Discovered Pools			20			
Undiscovered Pools			55			
Total Pools			75			
Discovered Accumulations						
Pool Rank				Original Recoverable Reserves		
Of	Of			Oil	Gas	BOE
Disc.	All	Field	Location	(MMbbl)	(Bcf)	(MMbbl)
1	1	Cojo Offshore (PRC 2879)	State Offshore	50.00	150.00	76.69
2	2	Government Point	Federal Offshore	21.00	211.70	58.67
3	4	Molino Offshore	State Offshore	3.02	200.00	38.61
4	7	Sacate	Federal Offshore	7.57	84.30	22.57
5	8	Wilson Rock	Federal Offshore	17.41	20.88	21.13
6	10	Pescado	Federal Offshore	6.14	62.33	17.23
7	15	Bardsdale	Onshore	6.34	30.00	11.67
8	21	Unnamed PRC 2879	State Offshore	5.00	17.50	8.11
9	24	Hondo	Federal Offshore	4.00	16.00	6.85
10	27	Shiells Canyon	Onshore	2.05	22.12	5.99
11	33	Capitan	Onshore	4.29	0.17	4.32
12	41	Oat Mountain	Onshore	2.73	1.37	2.97
13	47	Sacate OCS-P 0195	Federal Offshore	0.76	8.40	2.25
14	53	Santa Rosa	Federal Offshore	0.44	7.00	1.69
15	54	Point Conception	Onshore & State Offshore	1.41	0.87	1.56
16	55	Chaffee Canyon	Onshore	0.34	6.49	1.49
17	66	Conception Offshore	State Offshore	0.63	0.37	0.69
18	70	Sespe (Tar Creek-Topatopa)	Onshore	0.39	0.14	0.42
19	71	Ojai (Lion Mountain)	Onshore	0.35	0.20	0.39
20	75	Las Lajas	Onshore	0.09	0.06	0.10

Los Angeles Basin, Puente Fan Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	400	4,000
Trap Fill (fraction)	0.25	0.5	1.0
Pool Area (acres)	16	209	3,512
Net Pay (feet)	50	155	500
Pool Volume (acre-feet)	1,429	32,114	1,008,271
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	54	62	71
Number of Pools	0	19	39
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.7	
Reservoir Rock	1.0	0.8	
Trap	1.0	0.6	
Overall	1.0	0.3	0.3
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	180	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	220	900	3,600

Los Angeles Basin, San Onofre Breccia Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)			
Trap Fill (fraction)			
Pool Area (acres)	20	200	2,000
Net Pay (feet)	20	100	500
Pool Volume (acre-feet)	802	21,155	854,532
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	11	14	16
Number of Pools	0	4	13
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	1.0	0.7	
Reservoir Rock	1.0	0.8	
Trap	0.95	0.6	
Overall	0.95	0.3	0.29
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	70	180	450
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	150	400	1,000

Santa Monica-San Pedro Area, Upper Miocene Sandstone Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	30	300	3,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	7	109	2,585
Net Pay (feet)	30	95	300
Pool Volume (acre-feet)	396	10,290	418,690
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	58	70	86
Number of Pools	0	13	34
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.3	
Reservoir Rock	1.0	0.8	
Trap	1.0	0.8	
Overall	0.8	0.2	0.16
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	40	125	420
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	400	800

Santa Monica-San Pedro Area, Modelo Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	15	450	14,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	4	172	11,828
Net Pay (feet)	20	165	1,200
Pool Volume (acre-feet)	226	29,004	6,387,195
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	43	58	78
Number of Pools	0	11	31
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.95	0.5	
Reservoir Rock	0.95	0.7	
Trap	1.0	0.6	
Overall	0.9	0.2	0.18
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	20	90	480
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,100	6,850

Santa Monica-San Pedro Area, Dume Thrust Fault Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	24	420	7,400
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	6	157	6,182
Net Pay (feet)	130	370	1,000
Pool Volume (acre-feet)	1,451	57,935	3,583,980
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	51	60	69
Number of Pools	0	16	37
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.95	0.7	
Reservoir Rock	1.0	0.8	
Trap	0.7	0.5	
Overall	0.7	0.3	0.21
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	50	155	485
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	185	1,050	6,000

Santa Monica-San Pedro Area, San Onofre Breccia Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)			
Trap Fill (fraction)			
Pool Area (acres)	20	200	2,000
Net Pay (feet)	20	100	500
Pool Volume (acre-feet)	802	21,155	854,532
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	12	14	17
Number of Pools	0	4	14
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.95	0.7	
Reservoir Rock	0.95	0.8	
Trap	0.9	0.6	
Overall	0.8	0.3	0.24
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	70	180	450
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	150	400	1,000

Oceanside-Capistrano Basin, Upper Miocene Sandstone Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	35	600	11,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	9	221	8,908
Net Pay (feet)	50	155	500
Pool Volume (acre-feet)	967	33,903	2,331,045
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	63	88	124
Number of Pools	0	37	83
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.9	0.7	
Reservoir Rock	0.9	0.9	
Trap	0.8	0.8	
Overall	0.6	0.5	0.3
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	55	180	600
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	500	1,300

Oceanside-Capistrano Basin, Monterey Fractured Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	25	570	11,500
Reservoir Rock Thickness (feet)			
Reservoir Rock Volume (acre-feet)	3,000	200,000	12,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	685	72,545	8,526,200
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	64	90	137
Number of Pools	0	32	76
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.9	0.8	
Reservoir Rock	0.8	0.7	
Trap	0.95	0.8	
Overall	0.7	0.4	0.28
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	20	33	55
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	940	4,600

Oceanside-Capistrano Basin, Lower Miocene Sandstone Play

	Size of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	500	14,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	6	185	11,083
Net Pay (feet)	12	100	530
Pool Volume (acre-feet)	287	18,983	2,605,043
	Number of Accumulations		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	99	130	175
Number of Pools	0	0	74
	Type of Accumulations		
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
	Oil-filled Mixed Pool Volume		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
	Petroleum Geologic Probabilities		
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.7	
Reservoir Rock	0.8	0.7	
Trap	0.7	0.8	
Overall	0.4	0.3	0.12
	Hydrocarbon Recovery		
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	145	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,500	12,000

Oceanside-Capistrano Basin, Paleogene-Cretaceous Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	20	90	400
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	4	32	361
Net Pay (feet)	10	80	670
Pool Volume (acre-feet)	126	2,744	116,937
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	10	23	50
Number of Pools	0	0	27
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.5	
Reservoir Rock	0.7	0.8	
Trap	0.7	0.7	
Overall	0.3	0.3	0.09
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	50	180	700
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,600	12,000

Santa Cruz Basin, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	50	550	6,000
Reservoir Rock Thickness (feet)			
Reservoir Rock Volume (acre-feet)	20,000	350,000	7,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	4,017	115,290	4,988,500
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	40	55	75
Number of Pools	0	18	46
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.7	
Reservoir Rock	0.9	0.8	
Trap	0.9	0.8	
Overall	0.6	0.4	0.24
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	25	40	65
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	940	4,600

Santa Cruz Basin, Lower Miocene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	30	430	5,100
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	8	157	4,300
Net Pay (feet)	12	100	530
Pool Volume (acre-feet)	389	15,821	1,038,811
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	40	54	74
Number of Pools	0	0	46
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.7	0.6	
Reservoir Rock	0.9	0.8	
Trap	0.8	0.8	
Overall	0.5	0.4	0.2
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	145	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,500	12,000

Santa Rosa Area, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	50	575	7,000
Reservoir Rock Thickness (feet)			
Reservoir Rock Volume (acre-feet)	8,000	150,000	2,500,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	1,591	49,321	4,785,500
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	16	31	63
Number of Pools	0	0	39
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.5	0.7	
Reservoir Rock	0.9	0.8	
Trap	0.9	0.7	
Overall	0.4	0.4	0.16
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	25	40	65
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	940	4,600

Santa Rosa Area, Lower Miocene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	60	600	6,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	16	225	5,276
Net Pay (feet)	12	100	530
Pool Volume (acre-feet)	765	23,443	1,354,878
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	16	26	45
Number of Pools	0	0	25
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.5	0.7	
Reservoir Rock	0.8	0.6	
Trap	0.7	0.7	
Overall	0.3	0.3	0.09
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	145	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,500	12,000

Santa Cruz-Santa Rosa Area, Paleogene-Cretaceous Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	58	600	6,300
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	15	219	5,237
Net Pay (feet)	10	80	670
Pool Volume (acre-feet)	509	18,963	1,526,478
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	67	80	96
Number of Pools	0	0	46
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.6	0.6	
Reservoir Rock	0.8	0.7	
Trap	0.7	0.8	
Overall	0.3	0.3	0.09
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	50	180	700
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,600	12,000

San Nicolas Basin, Upper Miocene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	50	700	10,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	12	253	8,486
Net Pay (feet)	40	115	350
Pool Volume (acre-feet)	1,118	30,255	1,667,150
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	21	33	53
Number of Pools	0	0	34
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.7	
Reservoir Rock	0.7	0.8	
Trap	0.7	0.7	
Overall	0.4	0.4	0.16
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	45	150	450
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	500	1,300

San Nicolas Basin, Monterey Fractured Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	725	12,000
Reservoir Rock Thickness (feet)			
Reservoir Rock Volume (acre-feet)	2,800	200,000	12,000,000
Volume Fill (fraction)	0.09	0.3	1.0
Pool Volume (acre-feet)	620	75,193	8,496,800
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	21	42	82
Number of Pools	0	14	50
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.8	0.7	
Reservoir Rock	0.9	0.8	
Trap	0.9	0.8	
Overall	0.7	0.4	0.28
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	25	40	65
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	940	4,600

San Nicolas Basin, Lower Miocene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	40	700	11,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	10	255	9,137
Net Pay (feet)	12	100	530
Pool Volume (acre-feet)	504	26,117	2,193,454
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	38	60	96
Number of Pools	0	0	55
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.6	0.6	
Reservoir Rock	0.8	0.8	
Trap	0.8	0.8	
Overall	0.4	0.4	0.16
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	145	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,500	12,000

San Nicolas Basin, Paleogene-Cretaceous Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	65	730	8,000
Trap Fill (fraction)	0.13	0.35	1.0
Pool Area (acres)	16	277	6,763
Net Pay (feet)	10	80	670
Pool Volume (acre-feet)	572	23,970	2,036,101
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	31	54	95
Number of Pools	0	0	45
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.5	0.6	
Reservoir Rock	0.8	0.7	
Trap	0.9	0.8	
Overall	0.4	0.3	0.12
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	50	180	700
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,600	12,000

Cortes-Velero-Long Area, Lower Miocene Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	45	800	14,500
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	8	217	10,920
Net Pay (feet)	12	100	530
Pool Volume (acre-feet)	433	22,073	2,549,489
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	76	110	172
Number of Pools	0	0	91
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.5	0.6	
Reservoir Rock	0.9	0.8	
Trap	0.8	0.8	
Overall	0.4	0.4	0.16
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	30	145	550
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,500	12,000

Cortes-Velero-Long Area, Paleogene-Cretaceous Sandstone Play

Size of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Prospect Area (acres)	60	925	14,000
Trap Fill (fraction)	0.07	0.25	0.95
Pool Area (acres)	10	251	10,919
Net Pay (feet)	10	80	670
Pool Volume (acre-feet)	376	21,567	2,816,912
Number of Accumulations			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Number of Prospects	76	105	150
Number of Pools	0	0	64
Type of Accumulations			
Oil Pools (fraction)	1.0		
Gas Pools (fraction)	0.0		
Mixed Pools (fraction)	0.0		
Oil-filled Mixed Pool Volume			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Mixed Pools (fraction)	N/A	N/A	N/A
Petroleum Geologic Probabilities			
	<u>Play Chance</u>	<u>Prospect Chance</u>	<u>Average Chance</u>
Hydrocarbon Fill	0.5	0.6	
Reservoir Rock	0.9	0.7	
Trap	0.7	0.8	
Overall	0.3	0.3	0.09
Hydrocarbon Recovery			
	<u>Minimum</u>	<u>Median</u>	<u>Maximum</u>
Oil Yield (bbl per acre-foot)	50	180	700
Gas Yield (MMcf per acre-foot)	N/A	N/A	N/A
Condensate Yield (bbl per MMcf)	N/A	N/A	N/A
Solution Gas-to-Oil Ratio (cf per bbl)	200	1,600	12,000